Notes (05/15/2024)

Main Subjects Guide for Digital Technologies II Exam.

1. **Cybersecurity:**
    - **Basic Principles:** Understand the basics of cybersecurity including confidentiality, integrity, and availability of data.
    - **Common Threats:** Study the types of cybersecurity threats such as data breaches, malware attacks, and phishing.
    - **Preventive Measures:** Learn about cybersecurity best practices including the use of firewalls, antivirus software, and secure passwords.
2. **Hackers & Hacking Techniques:**
    - **Types of Hackers:** Know the different types of hackers (e.g., ethical, black hat, script kiddies) and their motivations.
    - **Hacking Techniques:** Understand various hacking techniques like DDoS attacks, man-in-the-middle attacks, and social engineering.
    - **Case Studies:** Review real-world hacking incidents to understand how theoretical knowledge applies in practical scenarios.
3. **Malware:**
    - **Types of Malware:** Familiarize yourself with different forms of malware, including viruses, trojans, ransomware, and adware.
    - **Propagation and Impact:** Learn how malware spreads and the potential impact on systems and data.
    - **Protection Strategies:** Study how to protect systems from malware using antivirus software, firewalls, and user education.
4. **Cookies and Safe Browsing:**
    - **Cookies:** Understand what cookies are, how they are used, and privacy concerns associated with them.
    - **Safe Browsing Practices:** Learn about the importance of safe browsing habits such as using secure connections (HTTPS), employing VPNs, and understanding browser security settings.
5. **Digital Footprint:**
    - **Understanding Digital Footprints:** Learn what constitutes a digital footprint and how online activities can be traced.
    - **Managing Online Presence:** Study strategies to manage and minimize digital footprints, such as privacy settings and careful sharing of information.
6. **Cybersecurity Laws:**
    - **Relevant Laws:** Familiarize with laws and regulations that pertain to digital privacy, cybersecurity, and data protection.

- **Ethical Considerations:** Understand the ethical implications in the context of cybersecurity and data handling.

Also view at https://sites.google.com/view/owca/notes/05-15-2024